

## WE CLAIM

1           1.     A method, comprising:  
2           analyzing a transport stream; and  
3           preparing the transport stream for processing that bypasses encrypted  
4 portions of the transport stream.

1           2.     A method according to Claim 1, wherein analyzing the transport  
2 stream includes determining which portions of the transport stream are to pass  
3 unencrypted.

1           3.     A method according to Claim 2, wherein determining which portions  
2 of the transport stream are to pass unencrypted is executed based on a statistical analysis.

1           4.     A method according to Claim 2, wherein determining which portions  
2 of the transport stream are to pass unencrypted is executed dynamically.

1           5.     A method according to Claim 2, wherein determining which portions  
2 of the transport stream are to pass unencrypted includes determining a permissible  
3 incursion beyond a packet header to gather data for the processing.

1           6.     A method according to Claim 2, wherein determining which portions  
2 of the transport stream are to pass unencrypted includes detecting a data packet  
3 containing at least a portion of a packetized elementary stream (PES) header.

1                   7.     A method according to Claim 2, wherein determining which portions  
2 of the transport stream are to pass unencrypted includes detecting bytes of data that are  
3 required for processing the transport stream.

1                   8.     A method according to Claim 1, wherein preparing the transport  
2 stream for processing includes encrypting portions of the transport stream that are not to  
3 pass unencrypted.

1                   9.     A method according to Claim 1, wherein preparing the transport  
2 stream for processing includes encrypting packets containing PES payload data.

1                   10.    A method according to Claim 1, wherein preparing the transport  
2 stream for processing includes leaving a packet containing a portion of a frame header  
3 unencrypted.

1                   11.    A method according to Claim 1, wherein preparing the transport  
2 stream for processing includes leaving bytes of data unencrypted that are required for  
3 processing the transport stream.

1                   12.    A method according to Claim 1, wherein preparing the transport  
2 stream for processing includes common scrambling packets composed of PES payload  
3 data.

1           13. A method according to Claim 1, wherein preparing the transport  
2 stream for processing includes:  
3           generating a multiplex-compliant encryption method packet; and  
4           inserting the multiplex-compliant encryption method packet into the  
5 transport stream.

1           14. A method according to Claim 13, wherein the encryption method  
2 packet identifies an encryption algorithm used in preparing the transport stream for  
3 processing, identifies encrypted portions of the transport stream, and provides data for  
4 deriving a decryption key.

1           15. A method according to Claim 13, wherein the encryption method  
2 packet identifies an unencrypted portion of the transport stream, a location of the  
3 encrypted portion of the unencrypted portion of the transport stream, and a process  
4 corresponding to the unencrypted portion of the transport stream.

1           16. A method according to Claim 13, wherein the encryption method  
2 packet is delivered via a private table.

1           17. A method, comprising:  
2           receiving a partially encrypted transport stream; and  
3           processing the transport stream in a manner that bypasses encrypted  
4 portions of the transport stream.

1           18. A method according to Claim 17, further comprising:  
2           receiving a multiplex-compliant encryption method packet corresponding  
3 to the transport stream; and  
4           decrypting encrypted portions of the transport stream using a decryption  
5 key.

1           19. A method according to Claim 18, wherein the decryption key is  
2 included in the encryption method packet or is received in an out-of-band message.

1           20. A method according to Claim 17, wherein processing the transport  
2 stream includes demultiplexing the transport stream based on unencrypted portions of the  
3 transport stream.

1           21. A method according to Claim 17, wherein processing the transport  
2 stream includes indexing payload data contained in the transport stream based on  
3 unencrypted portions of the transport stream.

1           22. A computer-readable medium having one or more instructions that  
2 are executable by one or more processors, the one or more instructions causing the one or  
3 more processors to:  
4           determine which portions of a transport stream are to pass unencrypted for  
5 processing that disregards encrypted portions of the transport stream; and  
6           prepare the transport stream for the processing.

1           23. A computer-readable medium according to Claim 22, wherein the  
2 one or more instructions to determine which portions of the transport stream are to pass  
3 unencrypted cause the one or more processors to leave unencrypted data packets having  
4 at least a portion of a PES header.

1           24. A computer-readable medium according to Claim 22, wherein the  
2 one or more instructions to determine which portion of the transport stream are to pass  
3 unencrypted cause the one or more processors to leave unencrypted bytes of data required  
4 for processing the transport stream.

1           25. A computer-readable medium according to Claim 22, wherein the  
2 one or more instructions to determine which portions of the transport stream are to pass  
3 unencrypted cause the one or more processors to leave unencrypted a threshold amount  
4 of data beyond packet header data that is relevant for the processing.

1           26. A computer-readable medium according to Claim 22, wherein the  
2 one or more instructions to prepare the transport stream for the processing cause the one  
3 or more processors to encrypt portions of the transport stream that are not to pass  
4 unencrypted.

1           27. A computer-readable medium according to Claim 26, wherein the  
2 one or more instructions causing the one or more processors to encrypt portions of the  
3 transport stream applies an advanced encryption standard (AES)-counter (CTR) mode  
4 cipher.

1           28. A computer-readable medium according to Claim 26, comprising  
2 one or more further instructions causing the one or more processors to:  
3           generate a multiplex-compliant encryption method packet; and  
4           insert the multiplex-compliant encryption method packet into the transport  
5 stream.

1           29. A computer-readable medium according to Claim 22, wherein the  
2 encryption method packet identifies an encryption algorithm used to prepare the transport  
3 stream for processing, identifies encrypted portions of the transport stream, and provides  
4 at least a basis for key to decrypt the encrypted portions of the transport stream.

1           30. A computer-readable medium according to Claim 22, wherein the  
2 encryption method packet identifies an unencrypted portion of the transport stream, a  
3 location of the unencrypted portion of the transport stream, and a process associated with  
4 the unencrypted portion of the transport stream.

1           31. A computer-readable medium having one or more instructions that  
2 are executable by one or more processors, the one or more instructions causing the one or  
3 more processors to:  
4           receive a partially encrypted transport stream; and  
5           process the transport stream based on unencrypted portions of the transport  
6 stream.

1                   32. A computer-readable medium according to Claim 31, comprising  
2 one or more further instructions causing the one or more processors to:  
3                   receive a multiplex-compliant encryption method packet corresponding to  
4 the transport stream; and  
5                   decrypt encrypted portions of the transport stream using an encryption key  
6 based in the encryption method packet.

1                   33. A computer-readable medium according to Claim 31, wherein the  
2 one or more instructions to process the transport stream cause the one or more processors  
3 to demultiplex the transport stream based on unencrypted portions of the transport  
4 stream.

1                   34. A computer-readable medium according to Claim 31, wherein the  
2 one or more instructions to process the transport stream cause the one or more processors  
3 to index payload data contained in the transport stream based on unencrypted portions of  
4 the transport stream.

1                   35. An apparatus, comprising:  
2                   an analyzer to determine which portions of a transport stream are to pass  
3 unencrypted for processing that does not incorporate encrypted portions of the transport  
4 stream; and  
5                   a scrambler to encrypt other portions of the transport stream based on the  
6 determination.

1           36. An apparatus according to Claim 35, wherein the analyzer is to  
2 dynamically determine that a threshold incursion into payload data is to pass unencrypted  
3 in order to process the transport stream without removing the encryption from other  
4 portions of the transport stream.

1           37. An apparatus according to Claim 35, wherein the analyzer is to  
2 determine that a packet containing at least a portion of a PES header is to pass  
3 unencrypted.

1           38. An apparatus according to Claim 35, wherein the analyzer is to  
2 determine that data arbitrarily disposed throughout PES payload data are to pass  
3 unencrypted.

1           39. An apparatus, comprising:  
2 means for determining which portions of a transport stream are to pass  
3 unencrypted for processing that does not incorporate encrypted portions of the transport  
4 stream; and  
5 means for encrypting other portions of the transport stream in accordance  
6 with the analysis.

1           40. An apparatus according to Claim 39, wherein the means for  
2 determining designates a dynamically determined amount of payload data to pass  
3 unencrypted in order to process the transport stream without removing the encryption  
4 from other portions of the transport stream.